

DIRECT TESTIMONY
OF
RUSSELL W. MURRAY

TELECOMMUNICATIONS DIVISION
ILLINOIS COMMERCE COMMISSION

DOCKET NO. 04-0192

May 20, 2004

1 **Q. Please state your name and business address.**

2

3 A. My name is Russell W. Murray and my business address is 527 East Capitol
4 Avenue, Springfield, Illinois 62701.

5

6 **Q. By whom are you employed and in what capacity?**

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8 A. I am employed by the Illinois Commerce Commission as a Utility Analyst in the
9 Telecommunications Division.

10

11 **Q. Please describe your professional background.**

12

13 A. I am retired from GTE/Verizon after 30 years of service. I began my career with
14 GTE of Illinois in 1970 as a Central Office Equipment Installer in Belvidere,
15 Illinois. As an Equipment Installer, I installed Electrical Mechanical switching
16 equipment, Special Service Equipment, and Transmission Equipment in GTE
17 Central Offices in Northern Illinois. In 1976, I became a Switching Technician in
18 New Milford, Illinois. In that capacity I conducted routine maintenance and repair
19 of Electrical Mechanical and the newer #2EAX electronic switches, as well as
20 maintenance and repair of various PABX switching equipment. I also worked on
21 customer related trouble. In 1984, I transferred from Belvidere, Illinois to
22 Bloomington, Illinois to work in the Switching Services Operations Center
23 (SSOC). There I provided technical support to the local Switching Technicians

24 who worked on the #2EAX and GTD5 electronic switches. I also assisted the
25 local technicians in performing the software upgrades called System Version
26 Releases (SVRs). The SSOC not only provided first line support but also was
27 the alarm-monitoring center as well as call out center for Illinois during off hours.
28 SSOC personnel, of which I was one, were on call seven days per week, twenty
29 four hours per day.

30 In 1987, I become an Instructor for GTE North, located in Bloomington, Illinois.
31 In that capacity, I instructed Management and Craft personnel on various
32 technical and operational characteristics of the GTD5 electronic switch. In 1990,
33 I returned to the Technical Support group. Again, I was responsible for providing
34 technical support not only to the Local Technicians but also to the group's own
35 Support Technicians. I also provided technical support and undertook Test
36 Engineering functions for the GTE's Equipment Installation group. In addition, I
37 was responsible for undertaking office conversions on several 5ESS switches
38 throughout Illinois. I helped develop and train the Local Technicians on ADSL
39 Testing in GTE North and provided technical support for the ATM network.
40 Further, I have worked on Local Number Portability (LNP) and helped to develop
41 the Fiber Restoration Procedures for GTE North.

42
43 **Q. What is the purpose of your testimony in this proceeding?**

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45 **A.** The purpose of my testimony is to address the technical aspects associated with
46 porting a telephone number from a wireline carrier to a wireless carrier.

47 **Q. Have you reviewed the testimony of Diverse Communications, Inc.**
48 **(“Diverse”) witness Gordon J. Kraut, Jr.?**

49

50 A. Yes.

51

52 **Q. Has Diverse raised any technical concerns regarding its ability to port a**
53 **telephone number to a wireless carrier?**

54

55 A. Yes. Diverse witness Gordon J. Kraut, Jr. has identified concerns regarding the
56 handling of a ported call to a wireless carrier. First Mr. Kraut states that Diverse
57 owns a remote switch that “homes” off of Woodhull Telephone Company’s “host”
58 switch. Mr. Kraut states that Diverse cannot upgrade its “remote” switch to
59 provide LNP; instead, that functionally is controlled in the “host” switch.¹

60

61 **Q. Is this statement made by Mr. Kraut accurate?**

62

63 A. Mr. Kraut is correct when he stated that its host controls the Diverse remote
64 switch. When the host switch upgrades its generic software to provide the LNP
65 function then Diverse is remote will be LNP capable.

66

67 **Q. Will Diverse be required to pay for the generic upgrade to the host in order**
68 **to provide LNP?**

¹ Diverse Communications, Inc., Inc. Exhibit 1, page 13.

69 A. Whether or not Diverse will be required to pay for the LNP upgrade is based
70 upon the current agreement between Diverse and Woodhull Telephone Company
71 (the owner of the "host" switch). If Diverse currently has an agreement requiring
72 it to pay for any portion of a generic upgrade then I am confident that it will be
73 required to pay for their portion of the upgrade.

74

75 **Q. Has Mr. Kraut expressed any additional concerns in his testimony?**

76

77 A. Yes. In his testimony Mr. Kraut states that, "There are 2 ways for Diverse to
78 deliver a call made by one of its subscribers to a ported wireless number."² I will
79 discuss each below.

80 According to Mr. Kraut, the first way is that Diverse "can treat the call as all other
81 long distance calls and assign a carrier identification code or CIC [] code to the
82 call as determined by the customer's presubscribed choice of IXC. The call will
83 then be placed on the toll trunks and the IXC will be responsible for handling that
84 call from Diverse's switch. The IXC will then bill the customer for that call."³

85

86 **Q. Do you agree with Mr. Kraut's assessment of the call handling of a wireline
87 to a ported wireless call?**

88

89 A. No.

90

² Diverse Communications, Inc., Inc. Exhibit 1, page 12.

91 **Q. What is your understanding of the way the call will be handled?**

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93 A. As I have previously testified to in the Alhambra-Grantfork Docket 03-0732, my
94 understanding of how a call from a Diverse wireline subscriber to a former
95 Diverse customer who has ported his or her telephone number to a wireless
96 subscriber is handled is as follows:

97 1. If Diverse ports a number to a wireless carrier, that ported customer keeps his
98 or her Diverse NPA-NXX⁴ but the number is assigned to the wireless carrier.

99 2. When a Diverse wireline subscriber calls the ported number of the wireless
100 subscriber, the Diverse Northern Telecom (Nortel) DMS-10 remote switch
101 recognizes that the number has been ported.

102 3. The Diverse's host DMS-10 switch performs an SS7 (Signaling System 7)
103 query to determine where and how to route the call.

104 4. The SS7 look up table tells Diverse's host DMS-10 switch to route the call to
105 the common final trunk group connected to the tandem switch. The tandem then
106 routes the call to the wireless carrier's trunk group.

107 5. Diverse's host DMS-10 switch uses its routing and billing tables associated
108 with the NPA-NXX to determine that the call is a local call. Also, note that when
109 a Diverse wireline subscriber calls a wireless subscriber (with an NXX code
110 assigned to a rate center outside of Diverse's rate center), that call is a toll call.

³ Id.

⁴ The Numbering Plan Area or "NPA" is commonly known as the area code. It refers to the first three of a ten-digit telephone number (NPA-NXXX-XXXX). An NXX code refers to the second three digits, where N represents any one of the numbers 2 through 9 and X represents any one of the numbers 0 through 9. See 47 C.F.R. § 52.7(c). It is assigned to a specific rate center for the purpose of identifying the rate center for routing and rating purposes.

Thus, calls to foreign NXX codes (i.e. those telephone numbers with an NXX not assigned to Diverse's rate center) will continue to be toll calls.

Q. How do you reconcile Mr. Kraut's concerns of calls to a Diverse NPA-NXX ported to a wireless carrier to your understanding of how the calls are handled in the previous question?

A. It is my understanding that all calls to a Diverse NPA-NXX, whether ported or not, will still be considered a local call. Accordingly, Mr. Kraut's concerns over toll billing would not be an issue.

Q. Does that mean Mr. Kraut is incorrect in his assumptions regarding toll billing?

A. Not necessarily. It only means my understanding of the situation and my past experience do not support Mr. Kraut's concern over toll billing to a ported local NPA-NXX. If Mr. Kraut provides specific examples and explains how the process is different from my understanding, I will consider that information and reevaluate my conclusion.

133 **Q. What is the second way proposed by Diverse to deliver a call made by one**
134 **of Diverse's subscribers to a ported wireless number?**

135 A. According to Mr. Kraut, Diverse can deliver ported wireless calls on the toll trunks
136 to SBC's Rock Island tandem making Diverse an IXC.

137

138 **Q. Do you have any comments regarding the second way that was purposed?**

139

140 A. Yes. Mr. Kraut statement implies that this method would make Diverse the IXC.
141 I differ in that a call between two numbers within the same exchange, regardless
142 of how it is routed, is a local call.

143

144 **Q. Does this conclude your testimony?**

145

146 A. Yes.